"A study to assess the level of knowledge regarding Gastroesophageal reflux disease among patients admitted in SMVMCH at puducherry"

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ABSTRACT
Gastroesophageal reflux disease (GERD) or gastro-oesophageal reflux disease (GORD) is a chronic condition in which stomach contents and acid rise up into the esophagus, resulting in symptoms and complication. Asthma is a disease of increased responsiveness of the airways to various stimuli including allergens and irritants that cause obstruction of the airways.[1]
The association between gastroesophageal reflux disease (GERD) and asthma is well accepted. The prevalence of GERD increases in asthmatics compared with normal controls, whereas GERD may induce or exacerbate asthma. They interact with each other in a cause and effect relationship. But the mechanism by which GERD might induce or aggravate asthmatic symptoms remains unclear. Two mechanisms have been proposed, including acid in the inflamed esophagus acting on exposed receptor causes an increase in bronchial hyperresponsiveness via the vagal reflex micro aspiration of gastric contents damage the bronchial mucosa, which result in inflammation of the mucosa and bronchial hyper-responsiveness.[2]

I. INTRODUCTION

Gastroesophageal reflux disease (GERD) or gastro-esophageal reflux disease (GORD) is a chronic condition in which stomach contents and acid rise up into the esophagus, resulting in symptoms and complication.[1] Gastroesophageal reflux disease (GERD) is a condition in which the stomach contents leak backward from the stomach into the esophagus (food pipe). Food travels from your mouth to the stomach through your esophagus. GERD can irritate the food pipe and cause heartburn and other symptoms. When a person eat, food passes from the throat the stomach through the esophagus. A ring of muscle fibers in the lower esophagus prevents swallowed food from moving backup. These muscle fibers are called the lower esophageal sphincter (LES).[3]When this ring of muscle does not close all the way, stomach contents can leak back into the esophagus. This is called reflux or gastroesophageal reflux. Reflux may cause symptoms. Harsh stomach acids canal so damage the lining of the esophagus. The risk for reflux includes use of alcohol (possibly) Hiatal hernia (a condition in which part of the stomach moves above the diaphragm, which is the muscle that separates the chest and abdominal cavities) Obesity Pregnancy Smoking Reclining with in 3hour safter eating Heartburn and gastroesophageal reflux can be brought on or made worse by pregnancy. Symptoms canal so be caused by certain medicines, such as Anticholinergics (for example, seasickness medicine) Bronchodilators for asthma Calcium channel blockers for high blood pressure, Progestin for abnormal menstrual bleeding or birth control Sedatives for insomnia or anxiety Tricyclic antidepressants.[7]

GERD occurs in people of all age sand sometimes for unknown reasons. It happens when the valve that prevents stomach contents from going backup to the esophagus becomes weak GERD occurs more commonly in people with obesity or people who are overweight because of increased pressure on the abdomen, pregnant women, affecting around 40-85% of people during pregnancy taking certain medications, including some asthma medications, calcium channel blockers, antihistamines, sedatives, and antidepressants who smoke and those with exposure to second hand smoke.[2]

GERD may result from a weak or damaged valve between the stomach and the esophagus. Stomach acid washes up into the esophagus can cause dangerous tissue damage. Maintaining a moderate weight, quitting smoking, and reducing stress can help reduce the risk of GERD. Treating GERD may involve the use of proton pump inhibitors (PPIs), antacids and other medications, as well as lifestyle changes.[5]

AIM OF THE STUDY
The aim of the study was to assess the level of knowledge regarding gastroesohageal reflux disease.

OBJECTIVES:

✟ To assess the level of knowledge regarding GERD among the patients.

✟ To associate the level of knowledge regarding GERD the patients with their selected demographic variable.

ASSUMPTION:

✟ It may improve the knowledge of patients regarding GERD

✟ Provide awareness about GERD during hospital stay.

II. METHODOLOGY

A total number of 30 patients were selected for this study. The descriptive study was conducted to assess the level of knowledge regarding gastroesophageal reflux disease among patients admitted at Sri Manakula Vinayagar Medical College and hospital, Puducherry. The level of knowledge of knowledge were assessed by structured questionaries among 30 patients by using convenient sampling technique.[6].

RESEARCH DESIGN:

A descriptive Research design was adapted for this study. .

SETTING OF THE STUDY:

The study was conducted at Sri Manakula Vinayagar Medical College and Hospital, Kalitheerthalkuppam, Puducherry

DESCRIPTION OF TOOL:

The tool used for this study consists of 2 sections namely.

⭘ Section A: Socio demographic Variables: Age, gender, Religion, educational

Status, occupational Status, marital Status, dietary habits, bad habits.

⭘ Section B: Multiple choice questionnaire regarding modifiable and nonmodifiable risk factors of lifestyle diseases among people residing atGERD patient in selected SMVMCH, Puducherry.

It consists of 25 items, each correct answer carries one mark.

DATACOLLECTIONPROCEDURE

After the validation of the tool and content from consent authority, the date and time will be fixed for collecting data. The sample of 30 GERD patient in selected SMVMCH with lifestyle diseases, who was selected by convenience sampling technique, after introducing and maintained interpersonal relationship with the GERD patient in selected SMVMCH

III. RESULTS

Majority of the patients (66.7%) had inadequate level of knowledge, and (33.3%) had moderate level of knowledge and (0) had adequate knowledge. (Pre test)

The mean and standard deviation of level of knowledge regarding tularemia among farmers is (8.23+3.598) respectively. (Pre test)

Majority of the patients (0) had inadequate level of knowledge, and (63.3%) had moderate level of knowledge and (36.7) had adequate knowledge (Post test)

The mean and standard deviation of level of knowledge regarding tularemia among farmers is (16.33+2.617) respectively. (Post test)

Frequency and percentage wise distribution of demographic variables amongpatients.
(N=30)

SL. NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	**Age in years**		
	20-25 age	5	16.7
	25-35 age	10	33.3
	35-45 age	10	33.3
	45 above	5	16.7
2	**Gender**		
	Male	13	43.3
	Female	17	56.7
	Transgender	0	0
3	**Religion**		
	Hindu	13	43.3
	Muslim	9	30

	Christian	7	23.3
	Others	1	3.4
4	**Educational status**		
	Illiterate	11	36.7
	Primary school	9	30
	Secondary school	8	26.7
	Graduate	2	6.7
5	**Residential area**		
	Urban	10	33.3
	Rural	13	43.3
	Semi urban	4	13.3
	Tribal	3	10.1
6	**Is there any history of GERD in family?**		
	Yes	15	50
	No	15	50
7	**Types of family**		
	Nuclear family	17	56.7
	Joint family	10	33.3
	Single	3	10
8	**Family status**		
	Poor economic status	9	30
	Middle class	11	36.7
	Rich economic status	10	33.3
9	**Previous knowledge about the GERD**		
	Yes	15	50
	No	15	50
10	**Marital status**		
	Unmarried	11	36.7
	Married	17	56.7
	Divorced	2	6.7
11	**Diet pattern**		
	Vegetarian	10	33.3
	Non-vegetarian	20	66.7
12	**Income**		
	10,000	9	30
	25,000	7	23.3
	15,000	14	46.7
	Below 10,000	0	0
13	**Sources of information regarding GERD**		
	Teachers	7	23.3
	Mass media	8	26.7
	Healthcare providers	8	26.7
	others	7	23.3
14	**Occupation**		
	Business	11	36.7
	daily wages	12	40
	unemployed	7	23.3
15	**Job type**		
	Government job	6	20
	Private job	9	30
	Own business	10	33.3
	Unemployed	5	16.7
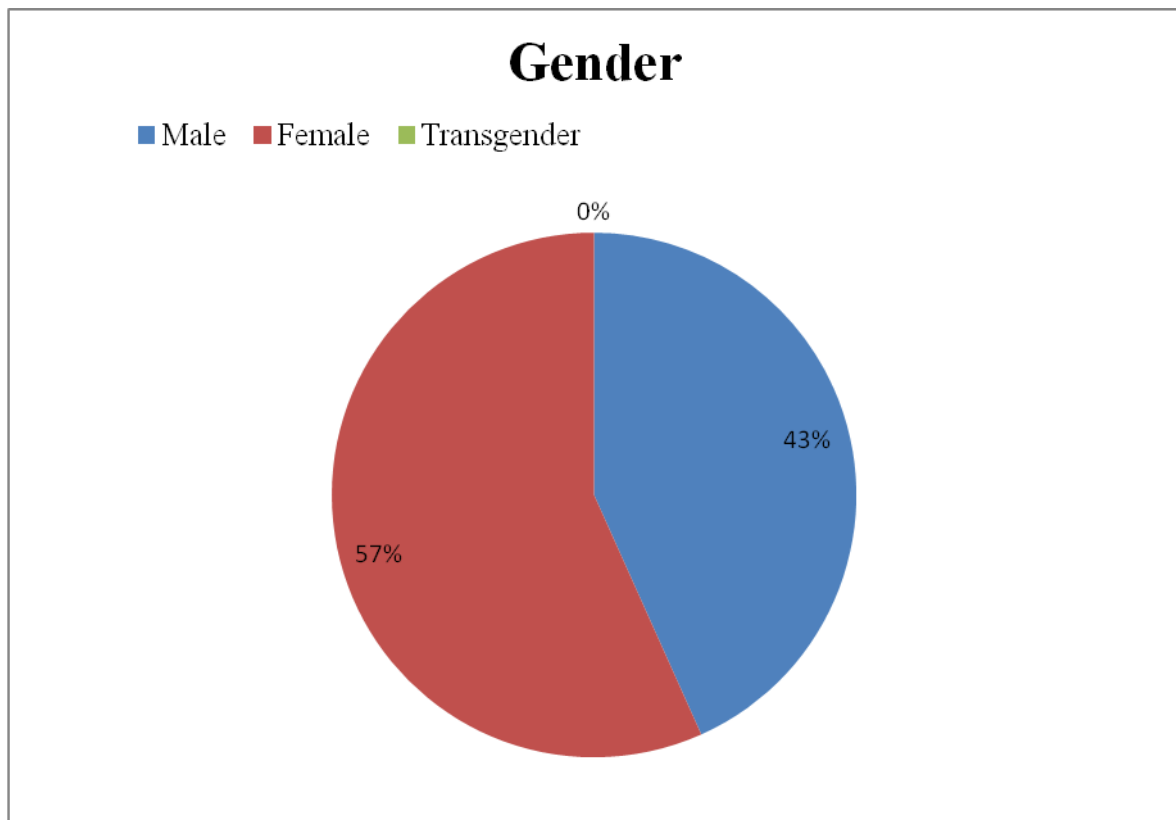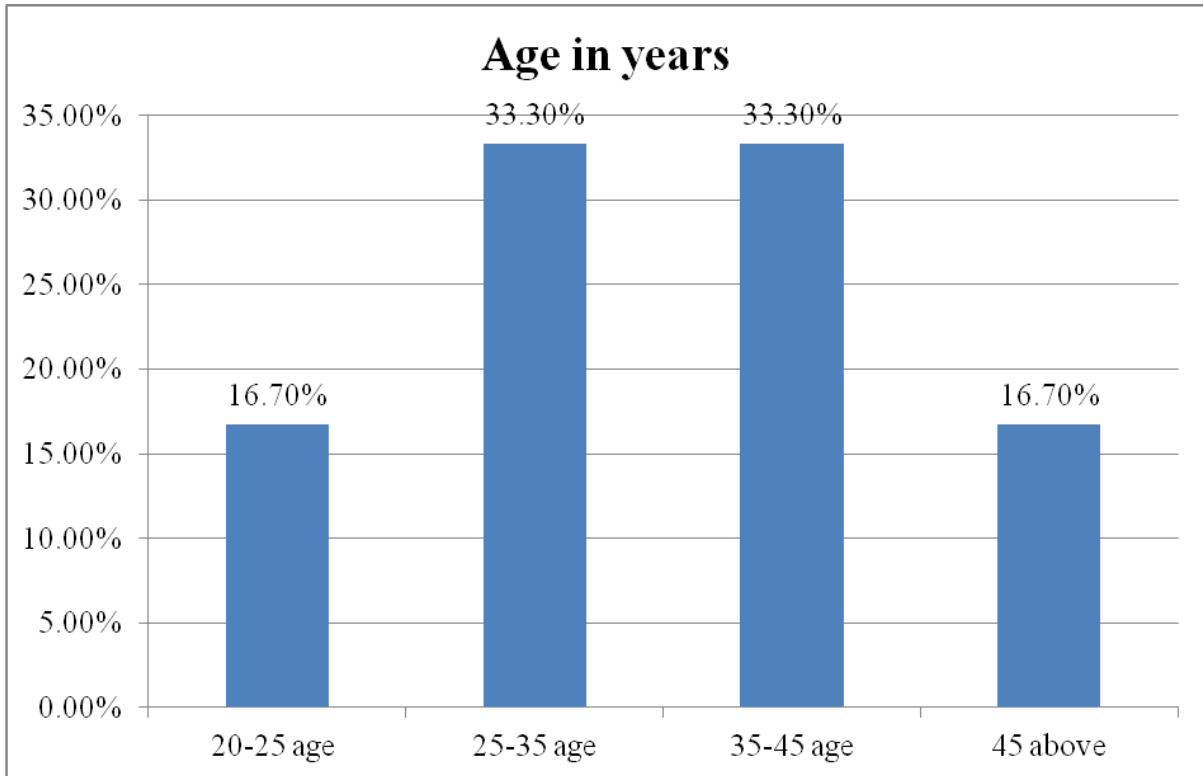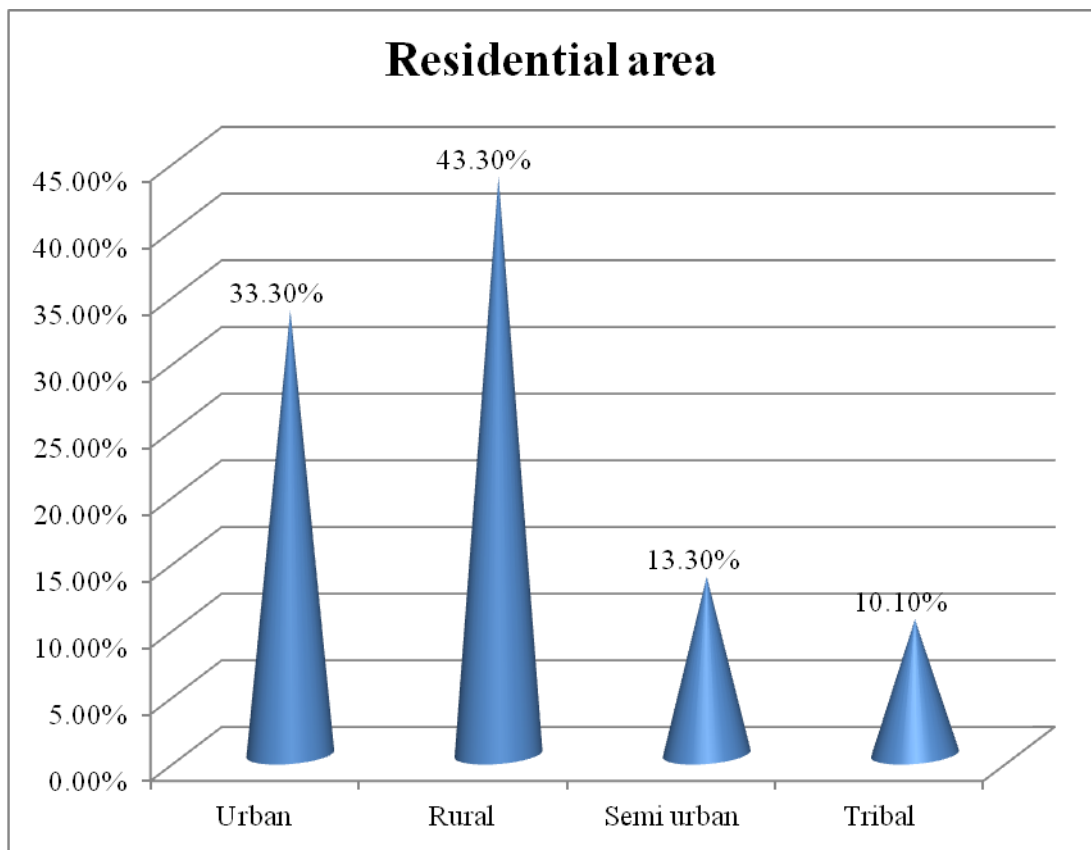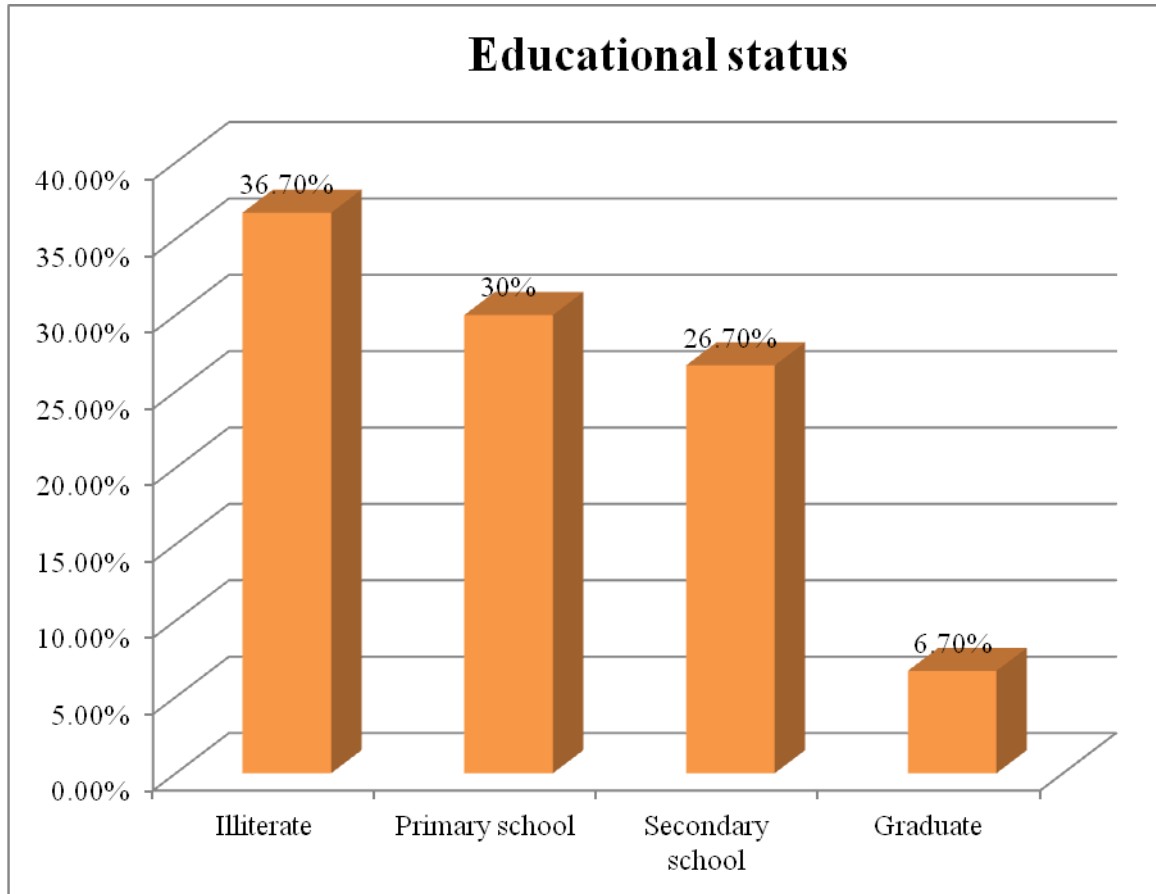
Age in years

Gender

Educational status

Residential area

Frequency and percentage wise distribution of pretest and post -test of the level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH.

(N=30)

| LEVEL OF KNOWLEDGE	PRETEST		POST TEST	
	N	%	N	%
INADEQUATE	20	66.7	0	0
MODERATE	10	33.3	19	63.3
ADEQUATE	0	0	11	36.7
Mean **Standard deviation**	8.23± 3.598		16.33 ± 2.617	

It shows that frequency and percentage wise distribution of pretest and post test of the level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH.

In pretest, Majority of patients 20(66.7%) had inadequate and 10(33.3%) had moderate level of knowledge and the mean and standard deviation of the level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH is 8.23± 3.598.

In post- test, Majority of patients 19(63.3%) had Moderate and 11(36.7%) had adequate level of knowledge and the mean and standard deviation of the level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH is 16.33 ± 2.617.
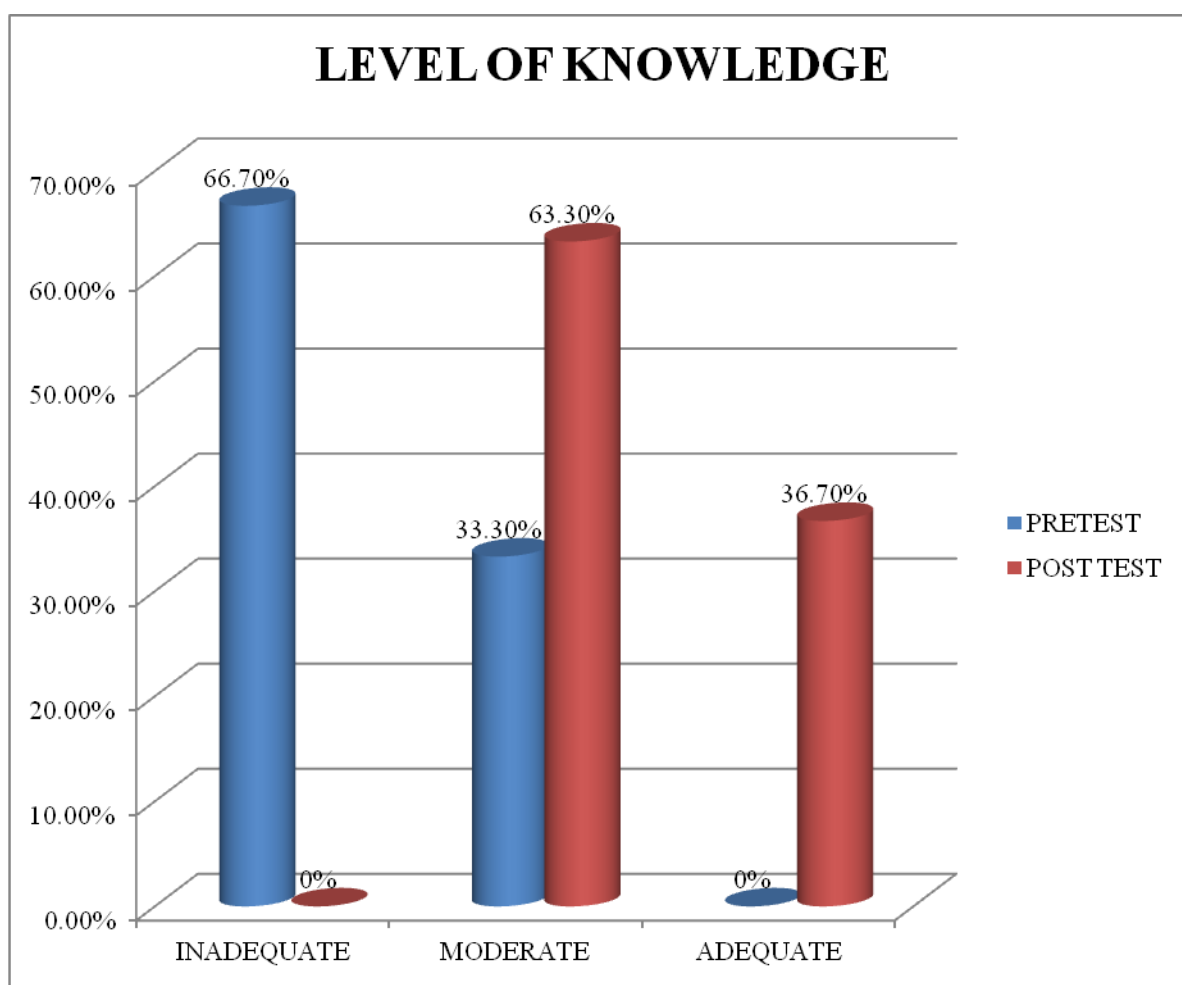
Effectiveness of the level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH.
(N=30)

GROUP	TEST	MEAN	STANDARD DEVIATON	MEAN DIFFEREN CE	't' VALUE Paired -t test	df	'p' VALUE
Level of Knowledge Regarding Gastroesophag Eal reflux Disease among Patients	**Pretest**	8.23	3.598	-8.100	-16.45	29	**0.000** HS**
	Posttest	16.33	2.617				

The mean score of effectiveness of the level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH in the pre-test was 8.23± 3.598 and the mean score in the post- test was 16.33 ± 2.617. The calculated *paired't' test* value of **t = -16.45** shows *statistically highly significant* difference of effectiveness of the level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH.

Association between the post-test level of knowledge regarding gastroesophageal reflux disease among patients admitted in SMVMCH with their selected demographic variables.
(N=30)

SL. NO	DEMOGRAPHIC VARIABLES	LEVEL OF KNOWLEDGE				Chi-square X^2 and P-Value
		MODERATE		ADEQUATE		
		N	%	N	%	
1	**Age in years**					X^2=2.01 Df=3 p =0.570 NS
	20-25 age	4	21.1	1	9.1	
	25-35 age	7	36.8	3	27.3	
	35-45 age	6	31.6	4	36.4	
	45 above	2	10.5	3	27.3	
2	**Gender**					X^2=0.032 Df=1 p =0.858 NS
	Male	8	42.1	5	45.5	
	Female	11	57.9	6	54.5	
	Transgender	0	0	0	0	
3	**Religion**					X^2=2.08 Df=3 p =0.556 NS
	Hindu	9	47.4	4	36.4	
	Muslim	6	31.6	3	27.3	
	Christian	4	21.1	3	27.3	
	Others	0	0	1	9.1	
4	**Educational status**					**X^2=11.57 Df=2 p =0.002 *S**
	Illiterate	7	36.8	4	36.4	
	Primary school	7	36.8	2	18.2	
	Secondary school	4	21.1	4	36.4	
	Graduate	1	5.3	1	9.1	
5	**Residential area**					**X^2=10.302 Df=3 p =0.016 *S**
	Urban	8	42.1	2	18.2	
	Rural	10	52.6	3	27.3	
	Semi urban	0	0	4	36.4	

	Tribal	1	5.3	2	18.2	
6	**Is there any history of GERD in family?**					$X^2=0.144$ Df=1 p =0.705 NS
	Yes	10	52.6	5	45.5	
	No	9	47.4	6	54.5	
7	**Types of family**					$X^2=0.076$ Df=2 p =0.963 NS
	Nuclear family	11	57.9	6	54.5	
	Joint family	6	31.6	4	36.4	
	Single	2	10.5	1	9.1	
8	**Family status**					$X^2=0.091$ Df=2 p =0.955 NS
	Poor economic status	6	31.6	3	27.3	
	Middle class	7	36.8	4	36.4	
	Rich economic status	6	31.6	4	36.4	
9	**Previous knowledge about the GERD**					$X^2=1.62$ Df=2 p =0.445 NS
	Yes	8	42.1	7	63.6	
	No	11	57.9	4	36.4	
10	**Marital status**					$X^2=3.84$ Df=2 p =0.147 NS
	Unmarried	7	36.8	4	36.4	
	Married	12	63.2	5	45.5	
	Divorced	0	0	2	18.2	
11	**Diet pattern**					$X^2=0.072$ Df=1 p =0.789 NS
	Vegetarian	6	31.6	4	36.4	
	Non-vegetarian	13	68.4	7	63.6	
12	**Income**					$X^2=2.07$ Df=2 p =0.354 NS
	10,000	7	36.8	2	18.2	
	25,000	5	26.3	2	18.2	
	15,000	7	36.8	7	63.6	
	Below 10,000	0	0	0	0	
13	**Sources of information regarding GERD**					$X^2=0.318$ Df=3 p =0.957 NS
	Teachers	5	26.3	2	18.2	
	Mass media	5	26.3	3	27.3	
	Healthcare providers	5	26.3	3	27.3	
	others	4	21.1	3	27.3	
14	**Occupation**					$X^2=0.173$ Df=2 p =0.917 NS
	Business	7	36.8	4	36.4	
	daily wages	8	42.1	4	36.4	
	unemployed	4	21.1	3	27.3	
15	**Job type**					$X^2=1.43$ Df=3 p =0.697 NS
	Government job	4	21.1	2	18.2	
	Private job	6	31.6	3	27.3	
	Own business	5	26.3	5	45.5	
	Unemployed	4	21.1	1	9.1	

IV. CONCLUSION:

O   Majority of the patients (66.7%) had inadequate level of knowledge, and (33.3%) had moderate level of knowledge and (0) had adequate knowledge. (Pre test)

O   The mean and standard deviation of level of knowledge regarding tularemia among farmers is (8.23+3.598) respectively. (Pre test)

O   Majority of the patients (0) had inadequate level of knowledge, and (63.3%) had moderate level of knowledge and (36.7) had adequate knowledge (Post test)

O   The mean and standard deviation of level of knowledge regarding tularemia among farmers is (16.33+2.617) respectively. (Post test)

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NURSING IMPLICATION

The findings of the study have implication related so nursing practice, nursing administration, nursing education, nursing research.

NURSING PRACTICE

Further studies can be conducted to promote awareness regarding gastroesophageal reflux disease hospital health education programme can be conducted.

NURSING ADMINISTRATION:

Through the research findings knowledge on GERD is inadequate among farmers. The nurse administrator can educate in community area among farmers about the information regarding Tularemia.

NURSING EDUCATION:

The medical surgical nursing curriculum needs to be strengthened in order to make the nursing students to know about GERD

Students should be provided with adequate opportunities for developing skills in handling such clients and how to identify the difficulties and help them to provide comfort and wellbeing.

Nursing Research

Afinding of the study can help the research to known the GERD which helped her to plan and do further research studies towards GERD among patients. The general aspect of the study result can be made by further replication of the study.

Recommendation

On findings of the present study the following recommendation have been made:

•   The same study can be conducted in other parts of the state with large sample.
•   The same study can be conducted with the experimental research design.
•   The same study can be done as a comparative study in different setting.
•   The same study can be conducted in control group.

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